What is claimed is:

1. An airport lighting aid simulation generator, comprising:

a means for receiving a plurality of navigation signals;

a means for retrieving airport information from a database as a function of one or more of the navigation signals;

a means for determining deviation from a glide path as a function of one or more of the navigation signals; and

a means for outputting a signal representative of the deviation from the glide path.

2. The generator of claim 1, further comprising a means for visually displaying the deviation from the glide path as a function of the deviation signal.

3. The generator of claim 2 wherein the displaying means further comprises means for displaying the deviation as a pattern of color coded indicators.

4. The generator of claim 2 wherein the displaying means further comprises means for displaying information as to the degree of deviation from the glide path.

5. The generator of claim 1 wherein the means for determining deviation from a glide path further comprises means for generating the glide path.

6. The generator of claim 1 wherein the means for determining deviation from a glide path further comprises means for retrieving the glide path from the database.

7. The generator of claim 1, further comprising a means for updating the deviation over time.

8. A simulated airport lighting aid generator, comprising:

a processor structured to receive a plurality of navigation signals representative of a position and an altitude of a host aircraft;

a signal generator operated by the processor, the generator being structured to retrieve airport information from a database as a function of the position signal, compare the position and altitude signals with a glide path, and output a signal representative of a degree of coincidence with the glide path as a function of the position and altitude signals; and

a display structured to receive the signal output by the signal generator and responsively output a visual indication of the degree of coincidence with the glide path.

9. The generator of claim 8 wherein the glide path further comprises one of the airport information retrieved from the database.

10. The generator of claim 8 wherein the glide path further comprises a glide path generated by the signal generator as a function of the position signal and a portion of the airport information retrieved from the database.

11. The generator of claim 8 wherein the indicators further comprise illuminated indicators positioned on a cockpit display.

12. The generator of claim 11 wherein the illuminated indicators are positioned on the display to appear in positions consistent with ground-based airport lighting aids as seen on approach.

13. The generator of claim 11 wherein the indicators further comprise a pointer indicator programmed to provide information as to a change in altitude whereby the degree of coincidence with the glide path is increased.

14. A glide path deviation generator, comprising:

a memory having a stored database of airport information accessible as a function of position, the airport information including runway location, elevation and direction information;

a processor coupled to receive position and elevation data and coupled to the memory for retrieving the airport information as a function of the position, the processor being structured to operate a computer program for generating a glide path, comparing the position and elevation data to the glide path, and generating a signal representative of deviation of the position and elevation data from the glide path; and

a cockpit display being coupled to receive the deviation signal and being structured to display a pattern of color coded indicators as a function of the deviation signal.

15. The generator of claim 14 wherein operating a computer program for generating a glide path further comprises operating the computer program as a function of the airport information to compute a glide path.

16. The generator of claim 14 wherein operating a computer program further comprises operating the computer program repeatedly for comparing updated position and elevation data to the glide path, and generating a signal representative of deviation of the updated position and elevation data from the glide path.

17. The generator of claim 14 wherein the pattern of indicators further comprises a pattern of indicators that substantially simulates an airport lighting aid.

18. The generator of claim 17 wherein the airport lighting aid substantially simulated by the pattern of indicators is one of a Precision Approach Path Indicator and a Visual Approach Slope Indicator.

19. The generator of claim 18 wherein the simulated Visual Approach Slope Indicator further comprises a pointer portion that is programmed to simulate a vertical deviation scale.

20. A computer program product for indicating deviation from a glide path, wherein the computer program product comprises:

a computer-readable storage medium; and

computer-readable program code means embodied in the medium, the computer-readable program code means comprising:

first computer-readable program code means for determining a global position from a received plurality of navigation data,

second computer-readable program code means for determining an altitude above ground level from one or more received navigation datum,

third computer-readable program code means for retrieving a plurality of airport information from a database of airport information as a function of the position determined from the first computer-readable program code means,

fourth computer-readable program code means for determining correspondence between the position determined from the first computer-readable program code means combined with the altitude determined from the second computer-readable

program code means and a glide path determined as a function of the airport information determined from the first computer-readable program code means, and

fifth computer-readable program code means for outputting a signal as a function of the correspondence determined from the fourth computer-readable program code means.

21. The computer program product of claim 20 wherein the fourth computer-readable program code means for determining correspondence between the position combined with the altitude and the glide path further comprises means for computing the glide path as a function of the airport information.

22. The computer program product of claim 20 wherein the fourth computer-readable program code means for determining correspondence of the position and altitude with the glide path further comprises computer-readable program code means for retrieving the glide path as one of the plurality of airport information retrieved from the database of airport information.

23. The computer program product of claim 20, further comprising sixth computer-readable program code means for interpreting the signal output by the fifth computer-readable program code means as a pattern of color coded indicators on a cockpit display.

24. The computer program product of claim 23 wherein the pattern of display indicators simulates a known airport lighting aid.

25. The computer program product of claim 24 wherein the simulated airport lighting aid further comprises a substantially conformal presentation.

26. The computer program product of claim 24 wherein the simulated airport lighting aid is a Visual Approach Slope Indicator.

27. The computer program product of claim 24, further comprising a seventh computer-readable program code means for interpreting the signal output by the fifth computer-readable program code means as a pointer indicator for simulating a vertical deviation scale on the cockpit display.

28. A method for using an electronic circuit to compare a signal conveying navigation data with a predetermined glide path, the method comprising:

receiving a plurality of navigation signals;

retrieving airport information from a database as a function of one or more of the navigation signals;

determining deviation from a glide path as a function of one or more of the navigation signals and one or more of the airport information; and

outputting a signal representative of the deviation from the glide path.

29. The method of claim 28, further comprising visually displaying the deviation from the glide path as a function of the deviation signal.

30. The method of claim 29 wherein displaying the deviation further comprises displaying the deviation as a substantially conformal presentation.

31. The method of claim 29 wherein displaying the deviation further comprises displaying color coded information as to a degree of deviation.

32. The method of claim 28 wherein determining the deviation from a glide path further comprises computing the glide path as a function of one or more of the airport information.

33. The method of claim 28 wherein determining the deviation from a glide path further comprises retrieving the glide path from the database.

34. The method of claim 28, further comprising updating the deviation over time.

35. The method of claim 34 wherein updating the deviation over time further comprises repeating the determining of the deviation from the glide path at predetermined intervals.